

REMARKS

This amendment is responsive to the Office Action dated April 18, 2006. Applicant has amended claims 1, 4, 6, 11, 13, 17, and 19, and cancelled claims 2-3, 5, 7, 10, 12, 15-16, 18 and 20. Claims 1, 4, 6, 8, 9, 11, 13, 14, 17 and 19 are pending.

Claim Rejection Under 35 U.S.C. §§ 102 and 103

In the Office Action, the Examiner rejected claims 1-9, 11-13, 15-20 under 35 U.S.C. 102(b) as being anticipated by Best (USPN 5,358,259). The Examiner rejected claims 10 and 14 under 35 U.S.C. 103(a) as being unpatentable over Best in view of James et al. (USPN 5,964,660). Applicant respectfully traverses the rejections. Best in view of James fails to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(b) and 103.

In general, Applicant's invention and Best are both directed to producing conversations between users and computer-generated characters. However, Applicant's claimed techniques are considerably different from the techniques taught by Best.

One fundamental difference between Applicant's claimed approach and the approach described in Best is that Applicant describes and claims use of "behavior patterns" that are defined separately and independently from characters and situations. For example, Applicant's amended claim 1 requires storing: (1) situation data that describes situations ("contexts"), (2) character data for each of a plurality of characters, and (3) a plurality of behavior patterns. Each of these elements is separately recited by claim 1.

Further to this point, amended claim 1 requires the step of presenting text-based dialogue from the currently selected character to the user by merging: (1) text-based dialogue specified by the frames of the currently selected behavior pattern, (2) situation text of the currently selected situation, and (3) character text of the currently selected character. Thus, amended claim 1 is limited to techniques in which "behavior patterns" are defined separately from characters and situations, and that text associated with these three separate elements is used to present contextually-accurate dialogue to the user.

To further clarify this point, amended claim 1 specifically requires that each of the behavior patterns can be used with the different characters and the different situations.

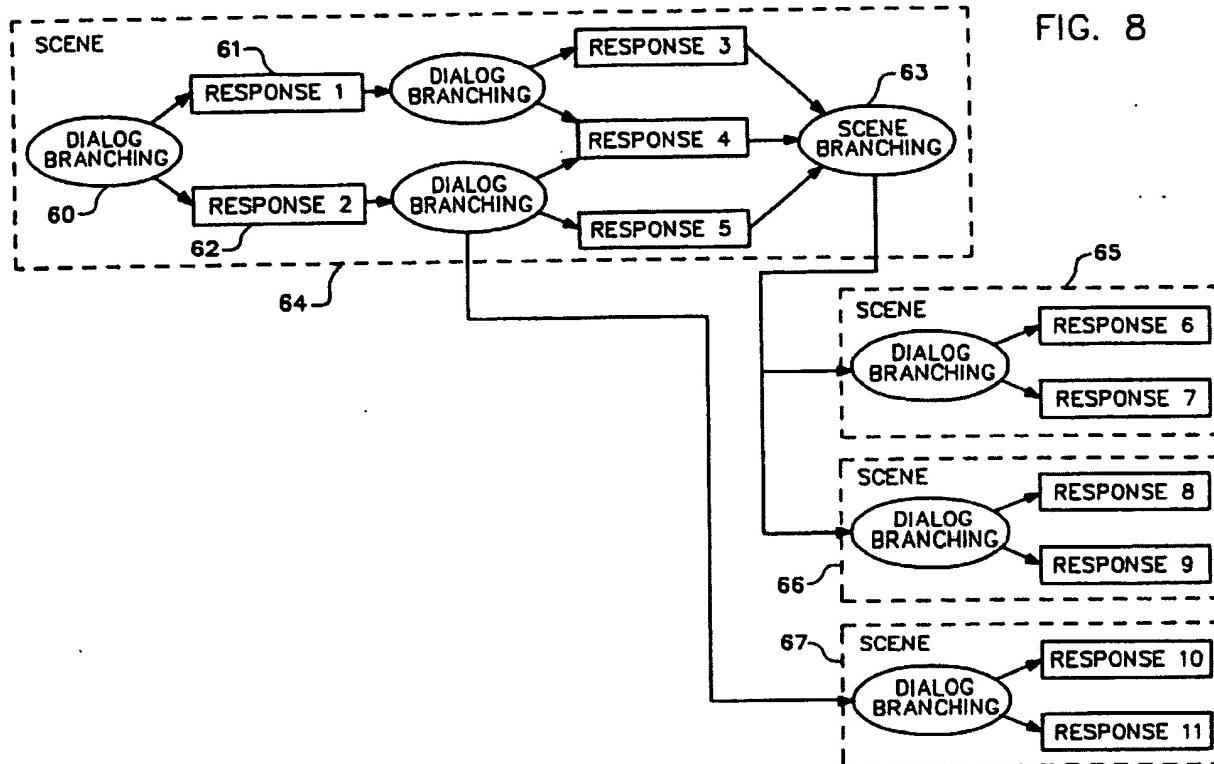
Applicant's approach may provide numerous advantages over the approach described in Best. For example, as set forth in the Summary of the present application, production costs for the online gaming environment may be dramatically reduced because any behavior pattern can merge with any situation to dynamically create media. Furthermore, as set forth on page 7, ll. 11-13, behavior patterns can readily be used with a variety of different situations, characters and locations to efficiently generate dialogue without appearing to the user as redundant.

In contrast, Best does not describe any technique for producing dialogue between a computer-generated character and a user where behavior patterns are defined separately from characters and situations. In the Office Action, the Examiner referred to Best at col. 4, ll. 10-19, which states:

The next time you encounter this situation the character has been modified to seem like a different person. His/her personality is different. His/her voice and face are different (chosen by the system from a catalog of voices and faces). The burning car is a different color. And the dialog has changed.

In order to accomplish this, Best utilizes conventional techniques that the Applicant avoided. For example, in order for the characters to "seem like a different person," Best follows the conventional approach each scene is programmed with many possible branching scenarios with specific characters. For example, in the Summary, Best states that "in each scene there are several branching dialog sequences, thereby providing a large variety of possible dialogs." Throughout the Best disclosure, Best describes storing a "preprogrammed branching dialog between a first animated character and a second animated character, each branch comprising a plurality of alternative verbal expressions." See, for example, claims 1 and 4. In this manner, Best makes use of conventional techniques where text for scenes are statically pre-defined with certain characters, and each scene has large alternative verbal expressions or textual branching sequences to give the user the impression that he or she has is experiencing something "new" with that character. In Best, all the text available to be presented to the user is tied to the individual scene, i.e., situation. None of the text is provided based on the currently selected character and certainly not from a behavior pattern that is separate from both the character and the situation.

FIG. 8 of Best, as cited by the Examiner and copied below, actually serves to illustrate these differences between Applicant's approach and the Best technique, where each scene is long-branching series with specific characters.



This old technique employed by Best is precisely one technique Applicant sought to avoid because of the technique's inflexible and inefficient nature. To provide a more flexible approach, Applicant invented the subject matter of claim 1 in which behavior patterns are defined independently of characters and situations. As described above, Applicant's claim 1 requires presenting text-based dialogue from a currently selected character to the user by merging: (1) text-based dialogue specified by the frames of the currently selected behavior pattern, (2) situation text of the currently selected situation, and (3) character text of the currently selected character. In Applicant's approach, behavior patterns, characters and situations can be defined and interchanged separately, and contextually-accurate dialogue can be generated in a more efficient and less time-intensive manner.

A second fundamental difference between Applicant's claim 1 and Best is the use of a set of relationship variables to represent the currently selected character's attitude toward the user, and the use of those variables to subsequently select different behavior patterns that are

independent of character and situation. Specifically, claim 1 requires receiving a selection from the user in response to the response dialogue, updating a set of relationship variables based on the selection and storing the relationship variables to represent the currently selected character's attitude toward the user based on interaction with the user in the behavior pattern. Claim 1 also requires selecting a second behavior pattern for the character as a function of the updated relationship variables when the first behavior pattern has been traversed.

With respect to these elements, the Examiner cites col. 4, ll. 1-34 of Best asserting that this portion describes a technique where the computer-generated character behavior and interaction will change once a scene has been completed. However, as discussed above, Best utilizes a technique where a database of "voices and faces" are selected so that the scene appears different. There is no suggestion that the "voices and faces" selected for the character in Best is based on a representation of that character's attitude toward the user based on previous interactions with the user in a previous behavior pattern, as required by claim 1.

Claim 1 requires updating a set of relationship variables based on the selection and storing the relationship variables to represent the currently selected character's attitude toward the user based on interaction with the user in the behavior pattern, and then selecting a second behavior pattern for the character as a function of the updated relationship variables. This means that the second behavior pattern is selected based on a representation of the currently selected character's attitude toward the user that was set in response to the user's interaction in the previous behavior pattern. Best does not teach or suggest such a technique when selecting voices and faces for characters in a particular scene.

In the example set forth in the Best passage at col. 4, ll.1-31, a character in a scene is first hysterical that her mother is trapped in a car. Next, when the same scene is subsequently encountered by the user, the character has a different face and voice, appears less hysterical, and asks for help because a boy is trapped in the car. In either case, it appears that the Best system has selected a voice and face from its catalogue and branched to different dialogue so as to give the user the perception of non-redundancy. This fails to teach or suggest the elements of claim 1 for two reasons. First, there is no suggestion that the character's behavior in Best is controlled based on relationship variables that are a current representation of that character's attitude toward the user based on previous interaction with the user, as required by claim 1. Second, there is no

suggestion of selecting a behavior pattern from a set of behavior patterns based on the relationship variables, where the behavior patterns are separate from characters and situations, as further required by claim 1.

As described in the Summary of the present application, relationship skill variables are maintained for the various characters of the gaming environment to track how the user treats the characters and how the characters perceive the user. The relationship skill variables influence the gaming environment and how the characters treat the user in future encounters. For example, if a user is belligerent or unfriendly toward a character when the character acts in a certain behavior, the character may treat the user badly in the future in other behavior patterns. If the user is helpful to the character when the character is following a first behavior, the character may be helpful later in subsequent behavior patterns. Thus, as described on pg. 5, ll. 17-18, for the same situation, a character may exhibit different behavioral attitudes toward different users based on past interaction with the users. This can effectively model human tendencies where interactions within certain types of behaviors influence subsequent behaviors. This can be powerful in creating contextually-accurate dialogue separate from scenes and individual characters, and such sophisticated techniques are not taught or suggested by Best.

James et al. (James) fails to address any of the deficiencies set forth above with respect to Best. James, for example, describes multi-user games where the users (players) send emails to convey moves. The “text” referred to by James is provided by the users themselves by way of email. Thus, James fails to describe any technique for accurately producing conversation between a computer-based character and a user at all.

Independent claims 11 and 13 are patentable over Best and James for similar reasons to those set forth above. Best in view of James fails to disclose or suggest each and every limitation set forth in Applicant’s claims. Withdrawal of the rejection of Applicant’s claims under 35 U.S.C. 102(b) and 103 is respectfully requested.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any

Application Number 10/696,083
Responsive to Office Action mailed April 18, 2006

additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

By:

October 17, 2006
SHUMAKER & SIEFFERT, P.A.
8425 Seasons Parkway, Suite 105
St. Paul, Minnesota 55125
Telephone: 651.735.1100
Facsimile: 651.735.1102

Kent J. Sieffert
Name: Kent J. Sieffert
Reg. No.: 41,312